

**U.S. DEPARTMENT OF COMMERCE  
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**MANUFACTURING METHODS AND TECHNOLOGY MEASURE FOR  
PLASTIC HOUSINGS FOR C-2328-B-GRA-39 AND  
C-2329-B-GRA-39 RADIO**

**EAGLE-PICHER INDUSTRIES, INCORPORATED  
JOPLIN, MISSOURI**

**20 SEPTEMBER 1976**

335099

AD A032470

**TWELFTH QUARTERLY PROGRESS REPORT**

**1 May 1976 to 31 July 1976**

**Manufacturing Methods and Technology Measure**

**For Plastic Housings for**

**C-2328-B-GRA-39 and C-2329-B-GRA-39 Radio**

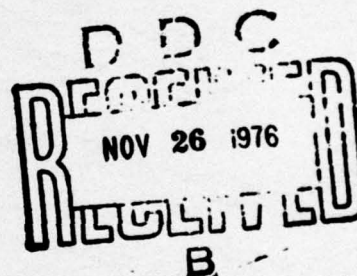
**AMC Contract # DAAB05-73-C-2081**

**Placed By**

**U. S. Army Electronics Command  
Production Division, Procurement and Production Directorate  
DRSEL-PP-I-PI-1  
Ft. Monmouth, New Jersey 07703**

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This project has been accomplished as part of the U. S. Army Advance Production Engineering Program, which has as its objective the timely establishment of manufacturing processes, techniques or equipment to insure the efficient production of current or future defense programs.

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UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER Twelfth Quarterly Progress Report No. 12	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Twelfth Quarterly Progress Report, Manufacturing Methods and Technology Measure for Plastic Housings for C-2328-B-GRA-39 and C-2329-B-GRA-39 Radio		5. TYPE OF REPORT & PERIOD COVERED Twelfth Quarterly Report 1 May 1976 to 31 July 1976
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s)  Dale V. Gordon		8. CONTRACT OR GRANT NUMBER(s)  DAAB05-73-C-2081
9. PERFORMING ORGANIZATION NAME AND ADDRESS Eagle-Picher Industries, Inc., Electronics Division, Couples Department Joplin, Missouri 64801		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS  2739615
11. CONTROLLING OFFICE NAME AND ADDRESS Department of the Army U. S. Army Electronics Command Fort Monmouth, New Jersey 07703		12. REPORT DATE 20 September 1976
		13. NUMBER OF PAGES //
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) Chief, DCASO Kansas City Room 201, Noland Plaza Office Bldg. 3675 South Noland Road Independence, Missouri 64055		15. SECURITY CLASS. (of this report)  UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE N/A
16. DISTRIBUTION STATEMENT (of this Report)  Distribution Unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)  N/A		
18. SUPPLEMENTARY NOTES  N/A		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)  1. First Articles have been found acceptable. 2. Pilot Run complete. 3. Acceptance Testing initiated.		



**MANUFACTURING METHODS AND TECHNOLOGY MEASURE**  
**FOR PLASTIC HOUSINGS FOR C-2328-B-GRA-39 and C-2329-B-GRA-39**  
**RADIO**

**TWELFTH QUARTERLY PROGRESS REPORT**

**1 May 1976 to 31 July 1976**

**Object of study; Establish a pilot production  
capability for producing plastic cases  
for Army Radio Sets - AN-GRA-39B**

**AMC Contract # DAAB05-73-C-2081**

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**ABSTRACT**

1. First Articles have been found acceptable.
2. Pilot Run complete.
3. Acceptance Testing initiated.



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## I. PURPOSE

The primary objective of this project is to perform the production engineering required to permit the replacement of aluminum housings with molded plastic housings for the AN/GRA-39B Radio Telephone. Major accomplishments which will result from the project are as follows:

1. To provide the engineering effort required to establish a capability for pilot line production of the following AN/GRA-39B Radio Housing parts.

A. Panel	(SM-D-450185)	C. Case	(SM-D-450170)
B. Panel	(SM-D-450179)	D. Cover	(SM-D-456214)
2. Determination, design and fabrication of special tooling, special test equipment, and prototype machines for the pilot line.
3. To prepare and revise as necessary a Management Evaluation Program.
4. Application of Quality Control Procedures including Quality Control Checks of pertinent points of manufacture.
5. To design, fabricate and test engineering samples for design approval.
6. To fabricate and test First Article Samples using pilot line equipment and tooling referred to in 2 above.
7. To perform a Pilot Production Run of 24 parts each to demonstrate the capability of producing 20 radio housings per 8 hour day.



8. To prepare test reports for engineering samples, First Article samples and Pilot Production units including reworked and rejected items.
9. To submit Monthly Letter Reports, Formal Quarterly Reports and a Final Report covering the entire period of the project. Also a step by step procedure of manufacturing instructions, specifications, information, and other data will be provided.
10. To prepare a General Report on Step II in accordance with paragraph 3.5.3 of Electronics Command Industrial Preparedness Procurement Requirements No. 15, Revised 3 August 1971.

## II. FACTUAL DATA

### A. First Article Retest

During the last report period, the first article samples were submitted by Eagle-Picher and approved by USAECOM.

### B. Pilot Production Run

Also during the pilot production run was in progress, USAECOM representative, Mr. Dick Lane, was at Eagle-Picher during the production to witness assembly methods, procedures and production rates. The production run was for twenty-five radio housings (not containing the radio set). No problems were experienced with required production rates being met.

### C. Acceptance Testing

Acceptance testing has been initiated during this report period. No problems have been experienced with approximately twenty percent of the testing complete.

### D. Program Schedule

All line items of the contract have been completed except those scheduled below:

	<u>Complete</u>
Acceptance Testing	9/15/76
Final Report Complete	9/30/76
Ship Pilot Run Units (25)	9/30/76
Ship Test Samples (8)	9/30/76



### III. CONCLUSIONS

The First Article Testing (rerun) was successfully completed and the Pilot Production Run witnessed by a representative from USAECOM during the last quarter. The rerun of the First Article Tests was completed with no failures.

Production rate requirements were met, with production procedures and techniques recorded.

It can be concluded the Production Engineering Measure requirements were demonstrated during the production run.